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**(54)MANUFACTURE OF PADDED VALVE SEAT,
AND CYLINDER HEAD**

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent cracking or the like in a padded part, and restrict deterioration in productivity in forming a padded valve seat on a cylinder head.

SOLUTION: Valve seat parts 2a, 2b as circular grooves are formed at adjacent positions to a side wall 1c connecting a lower surface 1a to an upper wall surface 1b on the upper wall surface 1b of a recessed combustion chamber formed on the lower surface 1a of a cylinder head 1, padding powder is supplied to the valve seat parts 2a, 2b while laser beam is applied to the powder to fuse it to form valve seats 2a, 2b. In this case, quantity of the padding powder charged in a laser beam irradiation range of the valve seat parts 2a, 2b is set constant for the whole range in the

circumferential direction of the valve seat parts 2a, 2b by setting powder supply quantity of the padding powder supplied by a powder supply means to an adjacent zone A adjacent to the side wall 1c in the circumferential direction of the valve seat parts 2a, 2b to be less than that supplied to other zones than the adjacent zone A.

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